ABSTRACT OF THE DISCLOSURE

To acquire a high-resolution frame from a plurality of frames sampled from a video image, it is necessary to obtain a high-resolution frame with reduced picture quality degradation regardless of motion of a subject included in the frame. Because of this, between a plurality of contiguous frames Fr_N and Fr_{N+1}, there is estimated a correspondent relationship. Based on the correspondent relationship, the frames Fr_{N+1} and Fr_N are interposed to obtain first and second interpolated frames Fr_{H1} and Fr_{H2}. Based on the correspondent relationship, the coordinates of the frame Fr_{N+1} are transformed, and from a correlation value with the frame Fr_N, there is obtained a weighting coefficient $\alpha(x^\circ, y^\circ)$ that makes the weight of the first interpolated frame Fr_{H1} greater as a correlation becomes greater. With the weighting coefficient, the first and second interpolated frames are weighted and added to acquire a synthesized frame Fr_G.